Subject Index—Volume 22

A

abdominal wall abnormality in neurofibromatosis, 836
abscess drainage, monitoring with saline microbubbles as sonographic contrast agent, 868
adenosine triphosphate
  dynamics in liver assessed with NMR spectroscopy, 685
  production in liver in ischemia, 479
ablumin
  labeled with GD-DTPA
    for intravascular MRI studies, 665
    in myocardial infarction, 713
  relaxation rates for, 382
alcohol, percutaneous intratumoral injection for cancer therapy, 472
American Association of Academic Chief Residents of Radiology (A^3CR^2), cases from, 338, 424, 694, 752, 836
Amipaque, *see* metrizamide
aneurysm
  aortic, disrupted aortic wall in, 372
  of ductus arteriosus, 240
  treatment with electromagnetically focused heat, 574
aneurysmal bone cyst, spinal, with bronchogenic carcinoma, 982
angiography
  abdominal, 973
  coronary
    analysis with cinevideodensitometry, 875
    ventricular fibrillation in, 106, 895
  digital subtraction
    in aortic rupture from trauma, 187
    in breast lesions (critical review), 698
    cerebral, comparison of iohexol and ioxaglate in, 811
    and coronary blood flow affected by contrast media, 722
    isotonic contrast media in, 597
    and measurements of coronary arteries with videodensitometry, 562
    transbrachial, in cerebrovascular disease (critical review), 758
  and interactions of contrast agents with vasodilators, 513
  and preoperative dye injections for bowel segment localization, 462
  and radiation dose absorbed by radiologist, 747
  in thromboembolism and vascular injury in young women, 62
angioplasty
  laser, and radial heating from hot tip probe, 954
  percutaneous transluminal, in renal transplant artery stenosis, 524
animals for research
  and design of research protocol, 615
  experiments with, 960
  issues with, 69
  pain management for, 348
  policies for, 175
  protocol review for, 253
  and training programs for scientists, 756
ankylosis of bone in rheumatoid arthritis, 303
anoxia, myocardial lactate accumulation in, 638
aorta
  aneurysm of, disrupted aortic wall in, 372
  rupture of, traumatic, diagnosis of, 187
arachnoiditis
  brain endorphin and spinal cord enkephalin in, 197
  pain threshold in, 781
arterial stenoses, hemodynamics in, 393
arthritis, rheumatoid
  bony ankylosis in, 303
  and indium-111 chloride for joint imaging in animal model, 733
  scoring system for assessment of, 41
Association of University Radiologists
  annual meeting of 1987, 703
    abstracts of, 760
  memorial award papers, 290, 990
  subspecialty recognition survey of, 429

B

barium studies of gastrointestinal tract
  glucagon in, 786
  in small bowel examination, 930
bladder, urodynamic studies of, 279
bleomycin-induced lung injury, proton relaxation times in, 621
blood
  magnetic resonance imaging of renal hemorrhage, 792
  pH levels after inhalation of low osmolar contrast media, 908
  proton relaxation in clots, 509
  volume studies with MRI, intravascular contrast agent in, 665
blood flow
  bronchial, measured by video dilution technique, 544
  bulk-flow phantom for MRI studies, 642
  cerebral, measurements with xenon/CT, 705
  coronary, contrast agents affecting, 722
  measurements with high-speed CT scanner, 960
  measurements with microspheres, 456
  renal, contrast media affecting, in immature animals, 608
  in renal ischemia, affecting MRI characteristics, 118
blood pressure, contrast media affecting
  in rabbit, 901
  and role of opioids, 905
bone
  aneurysmal cyst of spine with bronchogenic carcinoma, 982
  ankylosis in rheumatoid arthritis, 303
  changes in oxalosis, 752
  fat content assessment with CT, 799
  mineral determination with single-energy CT, 484
  radionuclide scanning after knee replacement, 891
  trabecular, analysis with CT, 209
bone-graft substitute, coralline hydroxyapatite, 590
bone marrow
  fat content assessment with CT, 799
  lipid/water ratio in, 741
  transplantation in acute leukemia, 839
book reviews
  Basic Bone Radiology (Griffiths), 849
  Imaging in Internal Medicine (Siegle, ed.), 699
  Imaging of the Temporal Bone, A Text (Swartz), 527
  Mammography—A User's Guide (NCRP Report), 181
  Nuclear Pharmacy. An Introduction to the Clinical Application of Radiopharmaceuticals (Chilton & Witcofski), 90
brain
  blood flow measurements with xenon/CT, 705
  cerebrospinal fluid spaces during cardiac cycle, 290
  computed tomography in pediatric near-drowning (critical review), 274
  dynamic CT images of, 651
  endorphins in arachnoiditis, 197
  fast imaging of CSF flow/motion patterns, 761
  intracerebral calcification in child, 694
  penetrance by intrathecal contrast agents, 672
  studies with positron tomography, 360, 529
breast
  digital mammography of, 581
  digital subtraction angiography of (critical review), 698
  instructional program for mammography, 990
bronchial blood flow measured by video dilution technique, 544

C

calcifications
  detection in digital mammograms, 581
  intracerebral, in child, 694
  in simulated pulmonary nodules, MRI studies of, 853
calculi, urinary, percutaneous and extracorporeal management of, 995
carcinoma
  and contrast enhancement with metalloporphyrin in MRI studies, 822

percutaneous intratumorsl injections of alcohol in, 472
pulmonary
with aneurysmal bone cyst of spine, 982
computed tomography of lung hilum in (critical review), 180
separation from collapsed lung by MRI studies, 538
of urachus, mucinous, 424
cataracts, radiation, and protective eyeglass materials, 688
catheters
urodynamic, types of, 279
cell cultures, contrast media affecting, 603, 678
cell types, and proton relaxation times, 346
cerebral angiography, comparison of iohexol and ioxaglate in, 811
cerebrospinal fluid
endorphin content in arachnoiditis, 197
fast imaging of flow/motion patterns, 761
signal intensity in spaces during cardiac cycle, 290
cerebrovascular disease
positron tomography in, 529
and transbrachial approach in digital subtraction angiography (critical review), 758
chemotherapy, hepatic arterial, and catheter-directed thrombolytic therapy, 467
chest films
in emphysema, 927
large II-TV digital system for, 328
in pulmonary edema, and characteristics with different etiologies, 859
routine use of, risk-benefit analysis in (critical review), 922
in traumatic aortic rupture, 187
unsharp masking and scatter rejection in lung nodule detection, 772
cholecystitis, chronic, diagnostic techniques in, 111
cholecystography, oral, in chronic cholecystitis, 111
cholecystostomy
tube in dissolution of gallstones, 201
chondroma, para-articular, of knee, 516
cine CT for right ventricular volume measurement, 451
cinevideodensitometry in analysis of coronary angiograms, 875
collagen crosslinked fibers in hepatic arterial embolization, 126
colon
cancer staging with computed tomography, 96
retroperitoneal, variable position of, 298
computed tomography
of abdominal aortic aneurysm with distrupted aortic wall, 372
in aggressive juvenile fibromatosis, 170
of brain, in pediatric near-drowning (critical review), 274
cerebral blood flow measurements with xenon, 705
cine CT for right ventricular volume, 451
compared with histologic findings in gastrointestinal tract, 227
and contrast enhancement of liver, 132
cranial, comparison of ioxaglate and Hypaque M60% in, 56
dynamic, for brain scans, 651
in esophageal carcinoma (critical review), 84
of fat content in bone and marrow, 799
high-speed x-ray for pulmonary artery geometry, 28
and iodipamide ethyl ester particles for liver/spleen enhancement, 408
of lung density in children, 627
to measure blood flow, 960
of mineral and fat content in trabecular bone, 209
of neurotoxic effects of intrathecal contrast agents, 672
number highlighting of temporomandibular joint, 315
of pulmonary hilum in lung cancer (critical review), 180
of retroperitoneal cancer, 298
of retropsoas recess, 550
in screening of dialysis patients for acquired renal cystic disease, 728
in separation of tumor mass from collapsed lung, 538
silicone gel phantom for, 153
single-energy CT for bone mineral determination, 484
in spinal aneurysmal bone cyst with bronchogenic carcinoma, 982
in staging of gastrointestinal malignancies, 2, 96
surface display and reformatting for 3D analysis of data in, 658
computer use
in evaluation of contrast enhancement of liver, 132
PHOENIX system in, 978
in simulation of arterial stenoses, 393
Conjoint Committee on Diagnostic Radiology, activities of, 925
Conray, *see* iothalamate
contrast media, *see also specific agents*
action on cranial vessels, 814
affecting coronary blood flow, 722
blood pressure changes from
and effects of piooids, 905
in rabbit, 901
boluses, in testing CT scanners, 960
cell cultures affected by, 603, 678
effects on hepatocytes, 603
encapsulated in liposomes, 47, 141
in gastrointestinal studies in neonates, 908
hepatic enhancement with, 132
hepatobiliary, in MRI, assessment of, 232
indium-111 chloride for joint imaging in arthritis model, 733
interactions with vasodilators, 513
intrathecal, passage into brain, 672
iodipamide ethyl ester particles for liver/spleen enhancement, 408
isotonic, in digital subtraction angiography, 597
nonionic, fibrillatory propensity of, 895
oxygen-dependent metabolism of, in MRI studies, 497
paramagnetic complexes for MRI, 322
physiologic effects in rabbit, 901
predictors of adverse reactions to, 490
and renal function in immature animals, 608
coralline hydroxyapatite as bone-graft substitute, 590
coronary artery disease
and cinevideodensitometric analysis of angiograms, 875
positron tomography in, 529
and stenosis measurements with videodensitometry, 562
coumadin, and thrombus uptake of platelets labeled with indium-111, 216
Council of Academic Societies report of administrative board meeting, 117
cranial CT, comparison of ioxaglate and Hypaque M60% in, 56
critical reviews
comparison of treatments in gastrointestinal hemorrhage, 354
computed tomography in esophageal cancer, 84
digital angiography in breast lesions, 698
fractionated radiotherapy, 447
noninvasive monitoring of tumor metabolism, 618
percutaneous transluminal angioplasty of renal transplant artery stenosis, 524
prognostic indicators in pediatric near-drowning, 274
pulmonary hilum in lung cancer, 180
risks and benefits of routine chest films, 922
surface-coil MRI studies of knee, 847
transbrachial approach for outpatient DSA in cerebrovascular disease, 758
ventilation-perfusion lung scanning in pulmonary embolism, 87
cystometrogram in urodynamic studies, 279

D

decision-making processes, assumptions in, 423
dementia, positron tomography in, 529
densitometry
cinevideodensitometric analysis of coronary angiograms, 875
radiographic, of bone-graft substitutes, 590
videodensitometry in coronary artery measurements, 562
dialysis patients, acquired renal cystic disease in, 728
diatrizoate
action on cranial vessels, 814
affecting coronary blood flow, 722
affecting hepatocytes and cell cultures, 603
blood pressure changes from, 905
encapsulated in liposomes, 47, 141
interaction with vasodilators, 513
liver enhancement with, 132
meglumine 60% compared with ioxaglate in cranial CT, 56
multiple intravenous injections of, 223

physiologic effects in rabbit, 901
and renal function in immature animals, 608
Doppler microwave for arterial pulase sensing, 569
drainage, percutaneous
of abscess, and saline microbubbles used as sonographic contrast agent, 868
of lymphoceles, in renal transplant patient, 864
drowning and near-drowning, and prognostic indicators in children (critical review), 274
ductus arteriosus aneurysm, 240
duodenum
cancer of, computed tomography in, 96
ulcers of, 437

E

edema
pulmonary, radiographic characteristics in different types of, 859
in renal ischemia, affecting MRI characteristics, 118
editorials, 68, 95, 359, 704, 925
education for radiology
and challenges for department chairmen, 345
curriculum topics in, 521
and disposition of unsuitable residents, 427
and encouragement of general radiologists, 916
and evaluation of resident performance, 986
film challenge conferences for residents in, 239
moonlighting in, 693
and presentation of scientific papers, 244
and problems of medical schools and teaching hospitals (current contents), 276
program for learning mammography, 990
and projection console use in conference room, 336
and report of AAMC task force, 613
and selection of residents, 353
and teaching of medical decision-making (current contents), 700
and teaching by radiology technologists, 343
unique medical school curriculum for, 246
electrocardiography, electrode placement in, for cardiac-gated MRI, 17
electromagnetic field focusing in aneurysm treatment, 574
electromyography of periurethral striated sphincter, 279
embolism, pulmonary
magnetic resonance imaging of, 937
ventilation-perfusion lung scanning in (critical review), 87
embolization procedures
in gastrointestinal hemorrhage
compared with vasopressin infusion (critical review), 354
polyvinyl alcohol particles in, 388
hepatic arterial, crosslinked collagen fibers in, 126
emphysema, chest films in, 927
endarterial occlusion, 969
endorphins
and blood pressure changes from contrast media, 905
in brain, in arachnoiditis, 197
enkephalin, spinal cord, in arachnoiditis, 197
enteroclysis in small bowel disease, 930
equipment for radiology
acquisition of, 148
inhouse servicing of, 508
projection console for conference room, 336
radioprotective eyewear and facewear, 688
sharing of, 71
esophageal malignancies
computed tomography in (critical review), 84
staging with computed tomography, 2
estrin, 973
ethiodized oil emulsion, liver enhancement with, 132, 834
eye movements in search for lung nodules, 417
eyewear, radioprotective, 688

F

factor XII as predictor of adverse reaction to contrast media, 490
fat in bone and marrow, assessment with CT, 209, 799
fibrillation, ventricular
during coronary angiography, 106
and sodium in nonionic contrast media, 895
fibrinolysis, urokinase and tissue-type plasminogen activator in, 23
fibromatosis, aggressive, in young boy, 170
fibrosarcoma, murine
and contrast enhancement with metalloporphyrin in MRI studies, 822
tumor size-dependent changes in (critical review), 618
fluorescein in preoperative angiographic bowel segment localization, 462
fluorodeoxyglucose in positron emission tomography of brain tumors, 360
fractionated radiotherapy (critical review), 447

G

gadolinium complexes in magnetic resonance imaging, 322
aerosolized, for lung water studies, 377
albumin labeled with
for intravascular studies, 665
in myocardial infarction, 713
gadolinium-153 scintigraphy in assessment of hepatobiliary agents for MRI, 121
gallbladder
diagnosis of chronic cholecystitis, 111
gallstones, dissolution with cholecystostomy tube, 201
gastrointestinal tract
barium studies of, glucagon in, 786
bowel loops in retropsoas recess, 550
bowel segment localization with preoperative angiography and dye injections, 462
comparison of imaging modalities with histologic findings in, 227
contrast media for studies in neonates, 908
detection of bleeding with intra-arterial scintigraphy, 37
embolization for hemorrhage in
compared with vasopressin infusion (critical review), 354
polyvinyl alcohol particles in, 388
nonoperative approach for ischemia induction in animals, 871
peptic ulcer disease, 437
small bowel radiography, 930
staging of malignancies with computed tomography, 2, 96
variable position of retroperitoneal colon, 298
gliomas, cerebral, positron tomography of, 529
glucagon in barium studies of gastrointestinal tract, 786
glucose metabolism
in brain tumors, and positron emission tomography, 360
metrizamide affecting, 137
grant proposals
preparation of, 250
processed by National Institutes of Health, 66

H

hand and wrist bony ankylosis in rheumatoid arthritis, 303
health care services
and problems of medical schools and teaching hospitals (current contents), 276
and radiology planning, 278
heart
cinevideodensitometric analysis of coronary angiograms, 875
coronary artery measurements with videodensitometry, 562
coronary blood flow affected by contrast media, 722
electrocardiography in cardiac-gated MRI, 17
fibrillation propensity of nonionic contrast media, 895
lactate accumulation assessed by magnetic resonance spectroscopy, 638
myocardial infarction studies with albumin-GD-DTPA for MRI, 713
positron tomography in coronary artery disease, 529
right ventricular volume measurement with cine CT, 451
ventricular fibrillation during coronary angiography, 106
heart rate in rabbit, contrast media affecting, 901
heat
focused, in aneurysm treatment, 574
parameters in hot tip laser angioplasty, 954

hematuria in urachal cancer, 424
hemodynamics of arterial stenoses, 393
hemorrhage
  gastrointestinal, embolization in
    compared with vasopressin infusion (critical review), 354
    polyvinyl alcohol particles in, 388
  pulmonary, and NMR spectroscopy, 632
  renal, magnetic resonance imaging of, 792
hepatic artery thrombosis, and thrombolytic therapy in cancer patients, 467
Hexabrix, *see* ioxaglate
hexokinase reaction, metrizamide affecting, 137
hoarseness and stridor, progressive, 338
homocystinuria, vascular disease and thromboembolism in, 62
hydrocephalus, and fast imaging of CSF flow/motion patterns, 761
hydroxyapatite, coralline, as bone-graft substitute, 590
Hypaque, *see* diatrizoate
hyperthermia, focused, in aneurysm treatment, 574
hypoxia
  and metabolism of magnetic resonance contrast agents, 497
  of tumor tissue, during tumor growth (critical review), 618

I

indium-111
  chloride, for joint imaging in arthritis model, 733
  platelets labeled with, uptake by thrombi affected by coumadin, 216
interferon, actions of, 259
International Commission on Radiological Protection, 918
intestines, *see* gastrointestinal tract
iodine levels in serum, multiple intravenous injections of diatrizoate affecting, 223
iodine-125, contrast agents labeled with, in liposomes, 141
iodipamide ethyl ester particles
  for liver/spleen enhancement in CT, 408
  uptake and dissolution in spleen, 829
iohexol
  action on cranial vessels, 814
  affecting coronary blood flow, 722
  affecting hepatocytes and cell cultures, 603
  blood pressure changes from, 905
  compared with ioxaglate, in cerebral angiography, 811
  and hexokinase reaction, 137
  interaction with vasodilators, 513
  intrathecal, passage into brain, 672
  and ventricular fibrillation incidence, 106, 895
iopamidol
  affecting hepatocytes and cell cultures, 603
  endotracheal instillation in neonatal piglets, 908
  and hexokinase reaction, 137
  interaction with vasodilators, 513
  isotonic, in digital subtraction angiography, 597
  and renal function in immature animals, 608
  and ventricular fibrillation incidence, 895
iosulamide meglumine, liver enhancement with, 132
iothalamate affecting hepatocytes and cell cultures, 603
iotrol
  encapsulated in liposomes, 141
  and hexokinase reaction, 137
ioversol, and ventricular fibrillation incidence, 895
ioxaglate
  action on cranial vessels, 814
  affecting hepatocytes and cell cultures, 603
  compared with Hypaque Meglumine 60%, in cranial CT, 56
  compared with iohexol, in cerebral angiography, 811
  endotracheal instillation in neonatal piglets, 908
  interactions with vasodilators, 513
  isotonic, in digital subtraction angiography, 597
  and ventricular fibrillation during coronary angiography, 106
ioxitalamate, isotonic, in digital subtraction angiography, 597
iron complexes, in magnetic resonance imaging, 322
ischemia
  hepatic, and monitoring of ATP dynamics with NMR spectroscopy, 685
  and lactate accumulation in myocardium, 638
  liver ATP metabolism in, 479
  myocardial, and MRI studies with albumin-(Gd-DTPA), 713
  small bowel, nonoperative induction in animals, 871
Isopaque, *see* metrizoate
isosulfan blue in preoperative angiographic bowel segment localization, 462
Isovue, *see* iopamidol

J

joint imaging
  indium-111 chloride for, in arthritis model, 733
  in knee, *see* knee
  temporomandibular, computed tomography number highlighting in, 315

K

kallikrein inhibitors, and prediction of adverse reaction to contrast media, 490
Kidney
  acquired cystic disease of, 728
  bilateral masses with tuberous sclerosis in pregnancy, 912
  function in immature animals affected by contrast media, 608
  hemorrhage in, magnetic resonance imaging of, 792
  ischemic, and effects of edema and blood flow on MRI characteristics, 118
  magnetic resonance microscopy of, 965
  and retrorenal colon, 298
  transplantation of
    percutaneous drainage of lymphoceles in, 864
    percutaneous transluminal angioplasty of artery stenosis in, 524
  urolithiasis management with percutaneous and extracorporeal techniques, 995
knee
  arthroplasty evaluation with bone scanning, 891
  high meniscal signal intensity of, 883
  para-articular chondroma of, 516
  studies with surface-coil MRI (critical review), 847

L

lactate accumulation, myocardial, assessed by NMR spectroscopy, 638
laryngeal sarcoidosis, 338
laser angioplasty, and radial heating from hot tip probe, 954
latex rubber balloons, 969
letters to the editor, 92, 357, 851
leukemia, acute, bone marrow transplantation in, 839
lipid
  proton relaxation affected by oxygen and nitroxides, 502
  ratio to water in bone marrow measured by NMR spectroscopy, 741
liposomes, contrast agents in, 47, 141
liver
  cancer of, animal model of, 149
  contrast enhancement of, 132
  contrast media affecting hepatocytes, 603
  enhancement with iodipamide ethyl ester particles in CT, 408
  hepatic arterial embolization with crosslinked collagen fibers, 126
  metabolism of ATP in ischemia, 479
  monitoring of ATP dynamics with NMR spectroscopy, 685
Lung
  bleomycin-induced injury of, proton relaxation times in, 621
  calcium quantification in simulated nodules, MRI studies in, 853
  carcinoma with aneurysmal bone cyst of spine, 982
  chest films in emphysema, 927
  density in children, measured by CT, 627
  enhancement with aerosolized gadolinium-DTPA, 377
  hemorrhage in, and NMR spectroscopy, 632

hilum imaging in lung cancer (critic review), 180
nodule detection in, 417
unsharp masking and scatter rejection in, 772
response to inhalation of low osmolar contrast media, 908
separation of tumor mass from lobar collapse by MRI studies, 538
ventilation-perfusion scanning in pulmonary embolism (critical review), 87
lymphoceles, percutaneous drainage of, in renal transplant patient, 864
lymphoma, and contrast enhancement with metalloporphyrin in MRI studies, 822

M

magnetic resonance imaging
aerosolized gadolinium complex for lung water studies, 377
albumin-(Gd-DTPA) in
in intravascular studies, 665
in myocardial infarction, 713
assessment of hepatobiliary agents in, 232
in bleomycin-induced lung injury, 621
bulk-flow phantom design for, 642
of calcium in simulated pulmonary nodules, 853
cardiac-gated
of cerebrospinal fluid spaces during cardiac cycle, 290
and electrode placement for ECG, 17
cell types and proton relaxation times in, 346
compared with histologic findings in gastrointestinal tract, 227
and fast imaging of CSF flow/motion patterns, 761
high meniscal signal intensity in knee, 883
metalloporphyrin contrast enhancement in tumor imaging, 822
microscopy with, 965
and modification of lipid proton relaxation, 502
of neurotoxic effects of contrast agents, 672
oxygen-dependent metabolism of contrast agents in, 497
in pancreatitis, 556
paramagnetic complexes as contrast agents in, 322
in pleural effusion analysis, 382
postradiotherapy findings in mice, 206
of prostate gland, 947
in pulmonary embolism, 937
in pulmonary hemorrhage, 632
of pulmonary hilum in lung cancer (critical review), 180
relaxation times and density measurements in, 158
and relaxation times of experimental clots, 509
in renal hemorrhage, 792
in renal ischemia, edema and blood flow affecting, 118
in separation of tumor mass from collapsed lung, 538
silicone gel phantom for, 153
in spinal aneurysmal bone cyst with bronchogenic carcinoma, 982
steady-state free precession technique in, 761
surface-coil use in knee studies (critical review), 847
magnetic resonance spectroscopy
in assessment of hepatic ATP dynamics, 685
for lipid/water ratios in bone marrow, 741
of liver ATP metabolism in ischemia, 479
in monitoring of tissue oxygenation in tumors (critical review), 618
of myocardial lactate accumulation, 638
of pleural fluid albumin, 382
of silicone gel phantom, 153
mammography
digital, 581
instructional program for, 990
manganese complexes in magnetic resonance imaging, 322
mannitol
action on cranial vessels, 814
affecting hepatocytes and cell cultures, 603
physiologic effects in rabbit, 901
manometry of bladder, 279
mediastinal mass, enlarging, evaluation of, 240
meglumine
calcium metrizoate, *see* metrizoate
diatrizoate, *see* diatrizoate
ioxaglate, *see* ioxaglate
mesenteric artery occlusion for nonoperative animal model of small bowel ischemia, 871
metal complexes in magnetic resonance imaging, 322
metalloporphyrin contrast enhancement in MRI tumor studies, 822
methylene blue in preoperative angiographic bowel segment localization, 462
metrizamide
affecting hepatocytes and cell cultures, 603
and hexokinase reaction, 137
intrathecal, passage into brain, 672
solutions, to test latex rubber balloons, 969
metrizoate
affecting hepatocytes and cell cultures, 603
cytostatic effects in cell cultures, 678
microcalcifications, detection in digital mammograms, 581
microscopy, magnetic resonance, 965
microspheres, distribution in hamster cheek pouch, 456
microwave, Doppler, for arterial pulse sensing, 569
mono-octanoin in dissolution of gallstones with cholecystostomy tube, 201
myelography, and neurotoxic effects of contrast agents, 672

N

naloxone, and blood pressure changes from contrast media, 905
National Council on Radiation Protection, Moseley Fund of, 692
National Institutes of Health, grant application processes of, 66
neurofibromatosis, abdominal wall abnormality in, 836
nitroglycerine interaction with ioxaglate, 513
nitroxides
oxygen-dependent metabolism of, 497
and relaxation of lipid protons, 502
nucleotide metabolism in liver, in ischemia, 479

O

observor performance
in detection of low-contrast signals, 311
in lung nodule detection, 417
and microcalcification detection in digital mammograms, 581
and scoring system for rheumatoid arthritis assessment, 41
variability in coronary angiography, 562
Omnipaque, *see* iohexol
opioids, and blood pressure changes from contrast media, 905
osmolality
and physiologic effects of contrast media in rabbit, 901
of serum, multiple intravenous injections of diatrizoate affecting, 223
oxalosis, skeletal pain in, 752
oxygen
and lactate accumulation in anoxic hearts, 638
and metabolism of magnetic resonance contrast agents, 497
and relaxation of lipid protons, 502
oxygenation of tumors
noninvasive monitoring of (critical review), 618
saline lavage in, 404

P

pain
and bone scanning after knee arthroplasty, 891
in bony oxalosis, 752
management in animal research, 348
thresholds in arachnoiditis, 781
pancreatitis, magnetic resonance imaging in, 556
papaverine interaction with ioxaglate, 513
paramagnetic complexes for magnetic resonance imaging, 322
pediatric radiology
aggressive juvenile fibromatosis, 170
contrast media for gastrointestinal studies in neonates, 908
intracerebral calcification in child, 694
lung density measured by CT, 627
prognostic indicators in near-drowning (critical review), 274
peptic ulcer disease, 437
peritoneal cavity, retropsoas recess in, 550

phantoms
bulk-flow, for MRI studies, 642
cinevideodensitometry of contrast-filled cylinders, 875
for computed tomography of fat in bone and marrow, 799
in coronary artery measurements, 562
head, and measurements of radiation dose to eye, 688
in magnetic resonance microscopy, 965
in pleural fluid studies with MRI, 382
silicone gel, for multimodality imaging, 153
phentolamine testing of bladder function, 279
PHOENIX system for selection of diagnostic imaging procedures, 978
plasminogen activator, tissue-type, with urokinase in fibrinolysis, 23
platelets labeled with indium-111, uptake by thrombi affected by coumadin, 216
pleural effusion analysis with magnetic resonance, 382
polyvinyl alcohol particles for embolization in gastrointestinal hemorrhage, 388
porphyrin derivatives, and metalloporphyrin contrast enhancement of tumors in MRI studies, 822
positron emission tomography
in brain tumors, fluorodeoxyglucose uptake in, 360
clinical utility of, 529
silicone gel phantom for, 153
prekallikrein activation as predictor of adverse reaction to contrast media, 490
pregnancy
and bilateral renal masses in tuberous sclerosis, 912
and leave granted for parenting, 436
projection console for radiology conference room, 336
prostate gland, magnetic resonance imaging of, 947
psoas muscle, and computed tomography of retropsoas recess, 550
pulmonary arteries, measurements with high-speed x-ray computed tomography, 28
pulse measurements with Doppler microwave, 569

R

radiofrequency probe for focused hyperthemia in aneurysm treatment, 574
radiologists
aptitude for image perception, 311
as consultants, 917
declarations and pleas used by, 751
and future manpower requirements, 515
and indications for diagnostic studies, 93
radiation dose absorbed during angiographic procedures, 747
and responsibilities of authorship, 1, 95
specialized services of, 73
and value of internal departmental review, 701
women as, 359
advancement of, 431
radiolucency, and symptomatic knees after arthroplasty, 891
radioprotective eyewear and facewear, 688
radiotherapy
and evaluation of irradiated tumors in mice, 206
fractionated (critical review), 447
rectal cancer staging with computed tomography, 96
renal artery stenosis in transplant patients, percutaneous transluminal angioplasty in, 524
renal cortical necrosis, 973
renal vasoconstriction, 973
Renografin, *see* diatrizoate
retroperitoneal colon, variable position of, 298
retropsoas recess, computed tomography of, 550
rheumatoid arthritis
bony ankylosis in, 303
and indium-111 chloride for joint imaging in animal model, 733
scoring system for assessment of, 41

S

saline
action on cranial vessels, 814
affecting hepatocytes and cell cultures, 603
and blood pressure changes from contrast media, 905
in contrast media, and ventricular fibrillation, 895
microbubbles as sonographic contrast medium, 868
physiologic effects in rabbit, 901
sarcoidosis, laryngeal, 338
scientific papers
presentation of, 244
scintigraphy
in assessment of gadolinium complexes, 232
bone scans after knee arthroplasty, 891
gadolinium-153 in assessment of hepatobiliary agents for MRI studies, 121
intra-arterial, in detection of gastrointestinal bleeding, 37
ventilation-perfusion lung scans in pulmonary embolism (critical review), 87
screening
of dialysis patients for acquired renal cystic disease, 728
and risks and benefits of routine chest films (critical review), 922
seizures, positron tomography in, 529
silicone gel phantom for multimodality imaging, 153
sonography, *see* ultrasonography
spectroscopy, magnetic resonance, *see* magnetic resonance spectroscopy
spinal cord
enkephalin in arachnoiditis, 197
injuries of, urodynamic studies in, 279
spine
aneurysmal bone cyst of, with bronchogenic carcinoma, 982
arachnoiditis affecting pain sensitivity, 781
spleen
enhancement with iodipamide ethyl ester particles in CT, 408
uptake and dissolution of iodipamide ethyl ester particles in, 829
stomach
cancer staging with computed tomography, 2
peptic ulcer disease, 437
stridor and hoarseness, progressive, 338
streptokinase in hepatic artery thrombolytic therapy in cancer patients, 467
stroke cases, positron tomography in, 529
sulfur colloid scintigraphy, intra-arterial, to detect gastrointestinal bleeding, 37

T

technetium-99m in intra-arterial sulfur colloid scintigraphy to detect gastrointestinal bleeding, 37
Telebrix, *see* ioxitalamate
television systems
bronchial blood flow measured with video dilution technique, 544
cinevideodensitometric analysis of coronary angiograms, 875
coronary stenosis measurements with videodensitometry, 562
in large II-TV digital chest system, 328
in projection console for conference room, 336
temporomandibular joint, computed tomography number highlighting of, 315
thermal effects of hot tip laser angioplasty, 954
thromboembolism
and proton relaxation in experimental clots, 509
pulmonary embolism
magnetic resonance imaging of, 937
ventilation-perfusion lung scanning in (critical review), 87
and vascular disease in homocystinuria, 62
thrombosis
and fibrinolysis with urokinase and tissue-type plasminogen activator, 23
hepatic artery, and thrombolytic therapy in cancer patients, 467
and uptake of platelets labeled with indium-111 affected by coumadin, 216
tolazoline interaction with ioxaglate, 513
transferrin receptors, 74
traumatic aortic rupture, diagnosis of, 187
tuberous sclerosis, and bilateral renal masses in pregnancy, 912

tumors
aggressive juvenile fibromatosis, 170
animal model of liver cancer, 149
bilateral renal masses with tuberous sclerosis in pregnancy, 912
computed tomography in esophageal carcinoma (critical review), 84
hypoxic tissue in, related to tumor size (critical review), 618
metalloporphyrin contrast enhancement in MRI studies, 822
and microsphere distribution in tumorous hamster cheek pouch, 456
mucinous adenocarcinoma of urachus, 424
oxygenation with saline lavage, 404
para-articular chondroma of knee, 516
percutaneous intratumoral injection of alcohol, 472
positron tomography of brain tumors, 360, 529
postradiotherapy findings with MRI in mice, 206
pulmonary hilum in lung cancer (critical review), 180
separation of tumor mass from collapsed lung by MRI studies, 538
staging of gastrointestinal malignancies with CT, 2, 96

U

ulcers, peptic, 437
ultrasonography
in chronic cholecystitis, 111
compared with histologic findings in gastrointestinal tract, 227
saline microbubbles as contrast medium in, 868
in screening of dialysis patients for acquired renal cystic disease, 728
transrectal, with urodynamic studies, 279
urachus, mucinous adenocarcinoma of, 424
urodynamic studies, principles of, 279
Urografin, *see* diatrizoate
urokinase
in hepatic artery thrombolytic therapy in cancer patients, 467
tissue-type plasminogen activator with, for fibrinolysis, 23
urolithiasis, percutaneous and extracorporeal management of, 995

V

vasculature
angiography of, *see* angiography
arterial pulse sensing with Doppler microwave, 569
computer simulation of arterial stenoses, 393
cranial vessels affected by contrast media, 814
diagnosis of traumatic aortic rupture, 187
diseases with thromboembolism in young women, 62
fibrinolysis with urokinase and tissue-type plasminogen activator, 23
focused hyperthermia in aneurysm treatment, 574
hepatic artery embolization with crosslinked collagen fibers, 126
hepatic artery thrombolytic therapy in cancer patients, 467
high-speed X-ray CT for pulmonary artery geometry, 28
intra-arterial scintigraphy to detect gastrointestinal bleeding, 37
laser angioplasty, and radial heating from hot tip probe, 954
percutaneous transluminal angioplasty of renal transplant artery stenosis, 524
positron tomography in coronary artery disease, 529
videodensitometric measurements of coronary artery stenosis, 562
wall of abdominal aorta in ruptured aneurysm, 372
vasodilators, interactions with contrast agents, 513
vasopressin antagonist effects on development of renal vasospasm, 973
vasopressin infusion in gastrointestinal hemorrhage, compared with embolization (critical review), 354
vasopressin, to induce renal vasospasm in rats treated with estrogen, 973
ventilation-perfusion lung scanning in pulmonary embolism (critical review), 87
video systems, *see* television systems
visual fields, and detection of lung nodules, 417
von Recklinghausen's neurofibromatosis, abdominal wall abnormality in, 836

W

women in radiology, 539
advancement of, 431
and leave granted in pregnancy, 436

X

xenon/computed tomography for cerebral blood flow measurements, 705

Z

Zollinger-Ellison syndrome, 437

Author Index — Volume 22

A

Abbitt, P. L., Dowd, C. F.: Young boy with abdominal wall abnormality, 836
Adams, D. F.: *see* Cheng, K. T.; *also see* Huber, D. J.
Adelstein, S. J.: Preparing a grant proposal, 250
Aho, H. J.: *see* Paajanen, H.
Albanese, M.: *see* Smith, W. L.
Anderson, J. H., Effmann, E. L.: Editorial comment: laboratory animal welfare, 68; *also see* Labs, J. D.
Andrews, J. C., Griggs, T. J., Ensminger, W. D., Gyves, J. W., Cho, K. J.: Local thrombolytic therapy for hepatic artery thrombosis following chemotherapy infusion catheter placement, 467
Armstrong, J. D., II: *see* Sorenson, J. A.
Atari, H.: *see* Kusano, S.
Austin, J. C.: *see* Isdale, J. M.

B

Baker, A. L.: *see* Zagoria, R. J.
Baker, L. L.: *see* Hajek, P. C.
Baker, R. J.: *see* Fornasiero, D.
Baleriaux, D.: *see* Delcour, C.
Ballerio, C., Bradley, B. R., Muller, H. H., Young, S. W.: Microsphere distribution in normal and tumor-bearing (DMBA-induced carcinogenesis) hamster cheek pouch, 456
Barker, B. R.: *see* Richards, T. L.
Baron, S.: *see* Stanton, G. J.
Bastian, B. V.: *see* Simons, M. A.
Becker, G. J.: *see* Denham, J. S.
Beinert, W. D.: *see* Richards, T. L.
Bellen, J. C.: *see* Fornasiero, D.
Bennett, H. F., Swartz, H. M., Brown, R. D., III, Koenig, S. H.: Modification of relaxation of lipid protons by molecular oxygen and nitroxides, 502
Bernstein, R.: *see* Hoehne, K. H.
Berry, I: *see* Terrier, F.
Beyer, G. A., Lipman, B. T., Haughton, V. M., Ho, K-C.: Effect of arachnoiditis on pain threshold, 781
Bidwell, K.: *see* Mirvis, S. E.
Bismuth, V.: *see* Frija, G.
Bjelland, J. C.: *see* Fajardo, L. L.
Bjorkengren, A.: *see* Hayward, I.
Blau, M.: *see* Cheng, K. T.
Bluth, E. I.: Incorporating radiology technologists into the faculty of medical student clerkships in radiology: the technical aspects workshop, 343
Boeckstyns, M.: *see* Duus, B. R.
Bonaly, A.: *see* Frija, G.
Bonnemain, B.: *see* Donadieu, A. M.; *also see* Frija, G.
Bookstein, J. J.: *see* Valji, K.
Boswell, W. D., Jr.: *see* Jabour, B. A.
Bowie, J. D.: *see* Cohan, R. H.
Bradley, B. R.: *see* Ballerio, C.
Bragg, D. G.: How the NIH processes a grant application: implications for radiology, 66; *also see* Sorenson, J. A.
Brant-Zawadzki, M. N.: *see* Mark, A. S.
Brasch, R. C.: *see* Montgomery, A. B.; *also see* Ogan, M. D.; *also see* Paajanen, H.; *also see* Schmiedl, U.
Bray, B. E.: *see* Simons, M. A.
Brito, A.: *see* Gamsu, G.
Brown, A. S.: *see* Saini, S.
Brown, M. A.: *see* Vock, P.
Brown, R. D., III: *see* Bennett, H. F.
Brown, T. R.: *see* Gatenby, R. A.
Brumberg, J.: *see* Burk, D. L., Jr.
Bucholz, R. W.: *see* Sartoris, D. J.
Buddemeyer, E. U.: *see* Mirvis, S. E.
Burgener, F. A., Steinmetz, S. D.: Treatment of experimental adenocarcinomas by per-

cutaneous intratumoral injection of absolute ethanol, 472
Burk, D. L., Jr., Kanal, E., Brumberg, J., Johnstone, G. F., Swensen, H. E., Wolf, G. L.: Critical review: 1.5-T surface-coil MRI of the knee, 847

C

Caldicott, W. J. H.: *see* Newman, B.
Callahan, L. F.: *see* Kaye, J. J.
Cann, C.: *see* Gamsu, G.
Carbo, P.: *see* Pope, C. F.; *also see* Sostman, D.; *also see* Sostman, H. D.
Cardinal, A.: *see* Donadieu, A. M.
Carroll, F. E.: *see* Kaye, J. J.
Chakraborty, D. P.: *see* Cousin, A. J.
Chan, H-P., Vyborny, C. J., MacMahon, H., Metz, C. E., Doi, K., Sickles, E. A.: Digital mammography: ROC studies of the effects of pixel size and unsharp-mask filtering on the detection of subtle microcalcifications, 581; *also see* Fujita, H.
Chang, J. B.: *see* Cohen, J. R.
Chapman, J. E.: *see* Heller, R. M.
Chase, D. R.: *see* Jasinski, R. W.
Chatterton, B. E.: *see* Fornasiero, D.
Chen, J. T.: *see* Sullivan, D. C.
Cheng, K. T., Seltzer, S. E., Adams, D. F., Blau, M.: The production and evaluation of contrast-carrying liposomes made with an automatic high-pressure system, 47
Chew, W. M.: *see* Schmiedl, U.
Cho, K. J.: *see* Andrews, J. C.
Choi, S. C.: *see* Fatouros, P. P.
Christensen, M. R.: *see* Richter, J. M.
Christensen, R., Pollei, S. R., Nemcek, A. A., Jr.: Intracerebral calcification in a child, 694
Christiansen, E. L., Thompson, J. R., Hasso, A. N., Hinshaw, D. B., Jr., Moore, R. J., Roberts, D., Kopp, S.: CT number characteristics of malpositioned TMJ menisci: diagnosis with CT number highlighting (blinkmode), 315
Christiansen, R.: *see* Nemcek, A. A., Jr.
Clouse, M. E.: *see* Lee, R. G. L.
Cofer, G. P.: *see* Hollett, M. D.
Cohan, R. H., Saeed, M., Sussman, S. K., Perlmutt, L. M., Schwab, S. J., Bowie, J. D., Dunnick, N. R.: Percutaneous drainage of pelvic lymphatic fluid collections in the renal transplant patient, 864
Cohan, R. H.: *see* Saeed, M.
Cohen, J. R., Leal, J., Pillari, G., Chang, J. B., Ilardi, C.: Superior mesenteric artery balloon occlusion: a nonoperative model of small bowel ischemia in dogs, 871
Colletti, P. M.: *see* Jabour, B. A.
Collins, S. M.: *see* Mahoney, L. T.
Conard, F. U.: *see* Nemcek, A. A., Jr.
Coumas, J.: *see* Goodsitt, M. M.
Cousin, A. J., Lawdahl, R. B., Chakraborty, D. P., Koehler, R. E.: The case for radioprotective eyewear/facewear: practical implications and suggestions, 688
Crooks, L. E., Hylton, N. M., Ortendahl, D. A., Posin, J. P., Kaufman, L.: The value of relaxation times and density measurements in clinical MRI, 158
Cross, C. E.: *see* Parsons, G. H.
Crouch, E.: *see* Tobler, J.
Cummings, T.: *see* Raptopoulos, V.
Cuttino, J. T., Jr.: Whither general radiology?, 916
Cuttino, J. T., Jr., Scatliff, J. H.: Resident performance evaluation, 986
Czervionke, L.: *see* Ramsey, R. G.

D

Daniels, A. M.: *see* Daniels, J. R.
Daniels, J. R., Kerlan, R. K., Jr., Dodds, L., McLaughlin, P., LaBerge, J. M., Harrington, D., Daniels, A. M., Ring, E. J.: Peripheral hepatic arterial embolization with crosslinked collagen fibers, 126
Daube-Witherspoon, M. E.: *see* Goldstein, D. C.
Davids, N.: *see* Kandarpa, K.
Davidson, R. I.: *see* Scatamacchia, S. A.
Davis, C. A.: *see* Richards, T. L.
Davis, S. M.: *see* Hopper, J. L.
DeBoe, S. F.: *see* Friedman, H. Z.
Dedrickson, D. R.: *see* Simons, M. A.
de Geer, G.: *see* Gamsu, G.
Delany, D. J., Scatliff, J. H., Thompson, B. G.: A multimodality projection console for the radiology conference room, 336
Delapaz, R. L.: *see* Hoehne, K. H.
Delcour, C., Vanderhofstadt, A., Vandenbosch, G., Baleriaux, D., Struyven, J.: Comparison of iohexol and ioxaglate for intravenous digital subtraction angiography of the neck and head, 811
Demas, B. E., Hricak, H., Williams, R. D., Leibel, S., Reinhold, C., Higgins, C. B.: Magnetic resonance imaging evaluation of radiation-induced changes in experimentally implanted renal cell carcinoma, 206
Denham, J. S., Becker, G. J., Siddiqui, A. R., Holden, R. W., Dreesen, R. G., Shiplett, C. A., Rogers, M. P., Mail, J. T., Park, H. M., Schauwecker, D. S., Klatte, E. C.: Detection of acute gastrointestinal bleeding by intra-arterial Tc-99m sulfur colloid scintigraphy in a canine model: preliminary study, 37
Derrick, P. L.: *see* Hopper, J. L.
de Sousa, M.: *see* Zalutsky, M. R.
DeWitt, D. S.: *see* Fatouros, P. P.
Diaconis, J. N.: *see* Mirvis, S. E.
Dianzani, F.: *see* Stanton, G. J.
Di Chiro, G.: Positron emission tomography using [^{18}F] fluorodeoxyglucose in brain tumors: a powerful diagnostic and prognostic tool, 360
Dike, D. H.: *see* Heller, R. M.
Dimick, R. N., Hedlund, L. W., Herfkens, R. J., Fram, E. K., Utz, J.: Optimizing electrocardiograph electrode placement for cardiac-gated magnetic resonance imaging, 17
Dodds, L.: *see* Daniels, J. R.
Doi, K.: *see* Chan, H-P.; *also see* Fujita, H.
Dommers, M.: *see* Ramsey, R. G.
Donadieu, A. M., Hartl, C., Cardinal, A., Bonnemain, B.: Incidence of ventricular fibrillation during coronary arteriography in the rabbit: a comparative study of isotonic ioxaglate and iohexol, 106
Donadieu, A-M.: *see* Frija, G.
Dowd, C. F.: *see* Abbitt, P. L.
Dreesen, R. G.: *see* Denham, J. S.
D'Souza, V. J.: *see* Zagoria, R. J.
Dunnick, N. R.: *see* Cohan, R. H.; *also see* Saeed, M.
Duus, B. R., Boeckstyns, M., Kjaer, L., Stadeager, C.: Radionuclide scanning after total knee replacement: correlation with pain and radiolucent lines: a prospective study, 891

E

Earthman, W. J.: *see* Kaye, J. J.
Edvinsson, L.: *see* Jansen, I.
Effmann, E. L.: *see* Anderson, J. H.; *also see* Sullivan, D. C.; *also see* Vock, P.
Ekholm, S. E.: *see* Simon, J. H.
Engelstad, B. L., White, D. L., Huberty, J. P., Wynne, C. S., Ramos, E. C., McNamara, M. T., Goldberg, H. I.: Hepatobiliary magnetic resonance contrast agents assessed by gadolinium-153 scintigraphy, 232
Engeseth, H.: *see* Schmiedl, U.
Ensminger, W. D.: *see* Andrews, J. C.
Erturk, E., Lange, P. H., Hulbert, J. C.: Percutaneous and extracorporeal management of urolithiasis, 995
Esser, P. D.: *see* Nickoloff, E. L.
Evens, R. G.: *see* Tobler, J.; *also see* Whitley, N. O.

F

Fajardo, L. L., Hillman, B. J., Hunter, T. B., Bjelland, J. C.: AUR memorial award-1987: the image of focused instruction on learning mammography, 990
Fatouros, P. P., Wist, A. O., Kishore, P. R. S., DeWitt, D. S., Hall, J. A., Keenan, R. L., Stewart, L. M., Marmarou, A., Choi, S. C., Kontos, H. A.: Xenon/computed tomography cerebral blood flow measurements: methods and accuracy, 705
Feinberg, D. A.: *see* Mark, A. S.
Feinstein, E. I.: *see* Jabour, B. A.
Ferrell, L. D.: *see* Tsay, D-G.
Ferrucci, J. T., Jr.: *see* Saini, S.
Field, F. I.: *see* Jasinski, R. W.
Filip, O. F.: *see* Yamanashi, W. S.
Finkbeiner, W. E.: *see* Schmiedl, U.
Fischer, H. W., Morris, T. W.: The imaging research laboratory: the rationale for sharing of equipment, 71; *also see* Rubin, D. I.
Fleischmann, W. R., Jr.: *see* Stanton, G. J.
Florentine, M.: *see* Mahoney, L. T.
Fonte, D. J.: *see* Simon, J. H.
Fornasiero, D., Bellen, J. C., Baker, R. J., Chatterton, B. E.: Paramagnetic complexes of manganese(II), iron(III), and gadolinium(III) as contrast agents for magnetic resonance imaging: the influence of stability constants on the biodistribution of radioactive aminopolycarboxylate complexes, 322
Foster, W. L., Jr.: *see* Thompson, W. M.
Fram, E. K.: *see* Dimick, R. N.
Franken, E. A., Jr.: *see* Smith, W. L.
Franklin, D. W.: *see* Kimmey, M. B.
Frazer, J.: *see* Lee, R. G. L.
Frick, M. P.: *see* Kelly, R. B.
Friedland, G. W.: *see* Perkash, I.
Friedman, H. Z., DeBoe, S. F., McGillem, M. J., Mancini, G. B. J.: Immediate effects of graded ionic and nonionic contrast injections on coronary blood flow and myocardial function: implications for digital coronary angiography, 772
Frija, G., Schouman-Claeys, E., Bonaly, A., Donadieu, A-M., Heran, F., Lacombe, P., Bismuth, V., Hartl, C., Bonnemain, B.: Study of isotonic contrast media in intravenous digital subtraction angiography, 597
Fuchs, H. A.: *see* Kaye, J. J.
Fujita, H., Doi, K., MacMahon, H., Kume, Y., Giger, M. L., Hoffman, K. R., Katafuchi, T., Ohara, K., Chan, H-P.: Basic imaging properties of a large image intensifier-TV digital chest radiographic system, 328

G

Gadeholt, G.: *see* Sands, M. S.
Gamsu, G., de Geer, G., Cann, C., Muller, N., Brito, A.: A preliminary study of MRI quantification of simulated calcified pulmonary nodules, 853
Gardiner, G. A., Jr.: *see* Kandarpa, K.
Gatenby, R. A., Brown, T. R.: Tumor oxygenation using direct injection of oxygenated saline, 404
Gavant, M. L.: *see* Winer-Muram, H.
Genant, H. K.: *see* Richards, T. L.
German, D. C.: *see* Saeed, M.
Ghaed, N.: *see* Hopper, K. D.
Giger, M. L.: *see* Fujita, H.
Glazer, H. S.: *see* Tobler, J.
Goldberg, H. I.: *see* Engelstad, B. L.; *also see* Tsay, D-G.
Goldstein, D. C., Kundel, H. L., Daube-Witherspoon, M. E., Thibault, L. E., Goldstein, E. J.: A silicone gel phantom suitable for multimodality imaging, 153
Goldstein, E. J.: *see* Goldstein, D. C.
Golman, K.: *see* Jansen, I.
Goodsitt, M. M., Rosenthal, D. I.: Quantitative computed tomography scanning for measurement of bone and bone marrow fat content: a comparison of singleand dual-energy techniques using a solid synthetic phantom, 799
Goodsitt, M. M., Rosenthal, D. I., Reinus, W. R., Coumas, J.: Two postprocessing CT techniques for determining the composition of trabecular bone, 209
Gore, J. C.: *see* Pope, C. F.; *also see* Sostman, D.; *also see* Taylor, C. R.
Grafe, M.: *see* Hayward, I.
Greenberg, D.: *see* Parsons, G. H.
Greenspan, R. H.: *see* Smith, R. C.
Grendell, J. H.: *see* Tsay, D-G.
Griggs, T. J.: *see* Andrews, J. C.
Grodd, W.: *see* Ogan, M. D.; *also see* Terrier, F.
Gylys-Morin, V. M.: *see* Hajek, P. C.
Gyves, J. W.: *see* Andrews, J. C.

H

Hagan, J. J., Yost, F. J., Nickoloff, E. L.: Prekallikrein activation, C1 esterase inhibitor and factor XII as predictors of adverse reaction to contrast media: a prospective study, 490
Haggitt, R. C.: *see* Kimmey, M. B.
Haghighi, P.: *see* Hajek, P. C.; *also see* Sartoris, D. J.
Hajek, P. C., Gylys-Morin, V. M., Baker, L. L., Sartoris, D. J., Haghighi, P., Resnick, D.: The high signal intensity meniscus of the knee: magnetic resonance evaluation and in vivo correlation, 883
Halgunset, J.: *see* Nordby, A.
Hall, D. A.: *see* Richter, J. M.
Hall, J. A.: *see* Fatouros, P. P.
Halvorsen, R. A., Jr., Thompson, W. M.: Computed tomographic staging of gastrointestinal malignancies: part I. esophagus and stomach, 2
Halvorsen, R. A., Jr.: *see* Thompson, W. M.
Han, J.: *see* Nickoloff, E. L.
Harnish, P., Mukherji, M., Kido, D. K.: Physiologic effects of contrast media in the rabbit, 901
Harnish, P. P., Mukherji, M., Northington, F. K., Kido, D. K.: Opiate involvement in contrast media-induced blood pressure changes, 905
Harrington, D.: *see* Daniels, J. R.
Harrington, D. P.: *see* Kandarpa, K.
Harris, L. H.: *see* Heller, R. M.
Hartl, C.: *see* Donadieu, A. M.; *also see* Frija, G.
Hasso, A. N.: *see* Christiansen, E. L.
Haugen, O. A.: *see* Nordby, A.
Haughton, V. M.: *see* Beyer, G. A.; *also see* Lipman, B. T.
Hawkes, R. C.: *see* Jolesz, F. A.
Hawkins, T. D., Szaz, K. F.: The permeability of detachable latex rubber balloons: an in vitro study, 969
Hayward, I., Yaru, N., Grafe, M., Sartoris, D. J., Bjorkengren, A., Resnick, D.: Knee pain and swelling in a 38-year-old-woman, 516
Hedlund, L. W.: *see* Dimick, R. N.; *also see* Stude, R. A.; *also see* Vock, P.
Heller, R. M., Chapman, J. E., Dike, D. H., Harris, L. H., James, A. E., Jr.: The disposition of the resident unsuited for the discipline and diagnostic radiology, 427
Hendee, W. R.: *see* Rackow, P. L.
Heran, F.: *see* Frija, G.
Herfkens, R. J.: *see* Dimick, R. N.; *also see* Vock, P.
Higgins, C. B.: *see* Demas, B. E.; *also see* Richards, T. L.; *also see* Tsay, D-G.
Higgins, W. J.: *see* Zagoria, R. J.
Hill, D. L.: *see* Yamanashi, W. S.
Hillman, B. J.: *see* Fajardo, L. L.
Hinshaw, D. B., Jr.: *see* Christiansen, E. L.
Ho, K-C.: *see* Beyer, G. A.
Hoehne, K. H., Delapaz, R. L., Bernstein, R., Taylor, R. C.: Combined surface display and reformatting for the three-dimensional analysis of tomographic data, 658
Hoffman, E. A.: *see* Liu, Y-H.
Hoffman, K. R.: *also see* Fujita, H.
Holcomb, W.: *see* Pope, C. F.
Holden, R. W.: *see* Denham, J. S.
Hollett, M. D., Cofer, G. P., Johnson, G. A.: In situ magnetic resonance microscopy, 965
Holmes, R. E.: *see* Sartoris, D. J.
Hopper, J. L., Davis, S. M., Tress, B. M., Kaye, A. H., Rossiter, S. C., Derrick, P. L.: Analysis of dynamic computed tomography scan brain images, 651
Hopper, K. D., Sherman, J. L., Williams, M. D., Ghaed, N.: The variable anteroposterior position of the retroperitoneal colon to the kidney, 298
Hricak, H.: *see* Demas, B. E.; *also see* Terrier, F.
Huber, D. J., Kobzik, L., Solorzano, C., Melanson, G., Adams, D. F.: Nuclear magnetic resonance spectroscopy of acute and evolving pulmonary hemorrhage: an in vitro study, 632
Huberty, J. P.: *see* Engelstad, B. L.
Huckman, M. S.: *see* Ramsey, R. G.
Hughes, C.: *see* Papp, M. A.
Hulbert, J. C.: *see* Erturk, E.
Hunt, S. T.: *see* Traughber, P. D.
Hunter, T. B.: *see* Fajardo, L. L.
Hwang, M. H.: *see* Piao, Z. E.
Hylton, N. M.: *see* Crooks, L. E.

I

Ilardi, C.: *see* Cohen, J. R.
Isdale, J. M., Le bowitz, B., Austin, J. C., Wright, P. G., Schmaman, A.: Blood gas pH and pulmonary response to the inhalation of low osmolar contrast media iopamidol and ioxaglate, 908

J

Jabour, B. A., Ralls, P. W., Tang, W. W., Boswell, W. D., Jr., Colletti, P. M., Feinstein, E. I., Massry, S. G.: Acquired cystic disease of the kidneys: computed tomography and ultrasonography appraisal in patients on peritoneal and hemodialysis, 728
James, A. E., Jr.: Report of AAMC task force on residency transition, 613; *also see* Heller, R. M.; *also see* Kessler, R. M.
James, M. E.: *see* Ramsey, R. G.
Jansen, I., Golman, K., Edvinsson, L.: Mechanisms of action of contrast media on cranial vessels: comparison of diatrizoate, ioxaglate, iohexol, mannitol, and NaCl on rabbit basilar and ear arteries, 814
Jasinski, R. W., Smith, D. C., Chase, D. R., Field, F. I.: Angiographic preoperative bowel segment localization using methylene blue, isosulfan blue, and fluorescein, 462
Johnson, G. A.: *see* Hollett, M. D.; *also see* Stude, R. A.
Johnstone, G. F.: *see* Burk, D. L., Jr.
Jokich, M. D.: *see* Kahn, C. E.
Jolesz, F. A., Patz, S., Hawkes, R. C., Lopez, I.: Fast imaging of CSF flow/motion patterns using steady-state free precession (SSFP), 761
Jones, R. S.: *see* Schirmer, B. D.

K

Kahn, C. E., Jr., Messersmith, R. N., Jokich, M. D.: Phoenix: an experty system for selecting diagnostic imaging procedures, 978
Kanal, E.: *see* Burk, D. L., Jr.
Kandarpa, K., Davids, N., Gardiner, G. A., Jr., Harrington, D. P., Selwyn, A., Levin, D. C.: Hemodynamic evaluation of arterial stenoses by computer simulation, 393
Karwande, S. V.: *see* Traughber, P. D.
Kasulis, P.: *see* Lee, R. G. L.
Katafuchi, T.: *see* Fujita, H.
Kathol, M.: *see* Smith, W. L.
Kaufman, L.: *see* Crooks, L. E.
Kaye, A. H.: *see* Hopper, J. L.
Kaye, J. J., Callahan, L. F., Nance, E. P., Jr., Pincus, T.: Bony ankylosis in rheumatoid arthritis: associations with longer duration and greater severity of disease, 303
Kaye, J. J., Nance, E. P., Jr., Callahan, L. F., Carroll, F. E., Winfield, A. C., Earthman, W. J., Phillips, K. A., Fuchs, H. A., Pincus, T.: Observer variation in quantitative assessment of rheumatoid arthritis: part II. a simplified scoring system, 41
Keenan, R. L.: *see* Fatouros, P. P.
Kelly, R. B., Mahoney, P. D., Frick, M. P.: The retropsoas recess: demonstration using computed tomography, 550
Kelsey, C.: *see* Tryhus, M.
Kenney, P. J.: *see* Koslin, D. B.
Keramati, B.: *see* Rothe, A. J.
Kerlan, R. K., Jr.: *see* Daniels, J. R.
Kessler, R. M., Partain, C. L., Price, R. R., James, A. E., Jr.: Positron emission tomography: prospects for clinical utility, 529
Kido, D. K.: *see* Harnish, P.; *also see* Harnish, P. P.; *also see* Rubin, D. I.

Kimmey, M. B., Silverstein, F. E., Haggitt, R. C., Shuman, W. P., Mack, L. A., Rohrmann, C. A., Moss, A. A., Franklin, D. W.: Cross-sectional imaging method: a system to compare ultrasound, computed tomography, and magnetic resonance with histologic findings, 227
Kindel, H. L.: The making of a radiologist: nature or nurture?, 310
King, G. T.: *see* Zagoria, R. J.
Kirks, D. R.: *see* Vock, P.
Kishore, P. R. S.: *see* Fatouros, P. P.
Kjaer, L.: *see* Duus, B. R.
Klatte, E. C.: *see* Denham, J. S.
Kobzik, L.: *see* Huber, D. J.
Kocsis, J., Szabo, E., Laszlo, F. A.: Effect of a vasopressin antagonist $d(CH_2)_5$ Tyr-(Met)AVP on the development of renal vasospasm induced by estrin plus vasopressin administration in rats, 973
Koehler, R. E.: *see* Cousin, A. J.; *also see* Koslin, D. B.
Koenig, S. H.: *see* Bennett, H. F.
Kontos, H. A.: *see* Fatouros, P. P.
Kopp, S.: *see* Christiansen, E. L.
Kormano, M.: *see* Lauteala, L.
Koslin, D. B., Kenney, P. J., Koehler, R. E., Van Dyke, J. A.: Magnetic resonance imaging of the internal anatomy of the prostate gland, 947
Kume, Y.: *see* Fujita, H.
Kundel, H. L., Nodine, C. F., Thickman, D., Toto, L.: Searching for lung nodules: a comparison of human performance with random and systematic scanning models, 417; *also see* Goldstein, D. C.; *also see* Wood, A. K. W.
Kusano, S., Murata, K., Ohuchi, H., Motohashi, O., Atari, H.: Low-dose particulate polyvinylalcohol embolization in massive small artery intestinal hemorrhage: experimental and clinical results, 388

L

LaBerge, J. M.: *see* Daniels, J. R.
Labs, J. D., White, R. I., Anderson, J. H., Williams, G. M.: Thermodynamic correlates of hot tip laser angioplasty, 954
Lacombe, P.: *see* Frija, G.
Lange, P. H.: *see* Erturk, E.
Lanir, A.: *see* Lee, R. G. L.
Lantz, B. M. T.: *see* Parsons, G. H.
Lasser, E. C.: Moving from the general to the particular, 495
Lauteala, L., Kormano, M., Violante, M. R.: Uptake and dissolution of particulate iodipamide ethyl ester in the spleen: a morphologic study, 829
Lawdahl, R. B.: *see* Cousin, A. J.
Leal, J.: *see* Cohen, J. R.
Lee, L. L.: *see* McGahan, J. P.
Lee, R. G. L., Lanir, A., Clouse, M. E.: Liver adenine nucleotide metabolism during ischemia and reperfusion of mice livers studied by phosphorous-31 nuclear magnetic resonance, 479
Lee, R. G. L., Springer, C., Kasulis, P., Lanir, A., Frazer, J., Clouse, M. E.: Nuclear magnetic resonance assessment of adenosine triphosphate (ATP) dynamics in ischemic mouse livers perfused with adenine and ribose, 685
Leibel, S.: *see* Demas, B. E.
Leibowitz, B.: *see* Isdale, J. M.
LePage, J. R.: *see* Yamanashi, W. S.
Lester, P. D.: *see* Yamanashi, W. S.
Levin, D. C.: *see* Kandarpa, K.
Levitt, R. G.: *see* Tobler, J.
Lin, J. C.: *see* Papp, M. A.
Link, D. P.: *see* Parsons, G. H.
Lipman, B. T., Haughton, V. M.: Brain beta-endorphin and spinal-cord enkephalin concentrations in experimental arachnoiditis, 197
Lipman, B. T.: *see* Beyer, G. A.
Lipman, J. C., Loughlin, K., Tumeh, S. S.: Bilateral renal masses in a pregnant patient with tuberous sclerosis, 912
Lipton, M. J.: *see* Richards, T. L.; *also see* Schmiedl, U.
Liu, Y-H., Hoffman, E. A., Ritman, E. L.: Measurement of three-dimensional anatomy and function of pulmonary arteries with high-speed x-ray computed tomography, 28
Loew, F. M.: Using animals in research: What's going on here?, 69
Lopez, I.: *see* Jolesz, F. A.
Lord, P. F.: *see* Sostman, H. D.
Loughlin, K.: *see* Lipman, J. C.

M

Mack, L. A.: *see* Kimmey, M. B.
MacMahon, H.: *see* Chan, H-P.; *also see* Fujita, H.
Mahoney, L. T., Smith, W., Noel, M. P., Florentine, M., Skorton, D. J., Collins, S. M.: Measurement of right ventricular volume using cine computed tomography, 451
Mahoney, P. D.: *see* Kelly, R. B.
Mail, J. T.: *see* Denham, J. S.
Malanowski, D.: *see* Vock, P.
Mancini, G. B. J.: *see* Friedman, H. Z.
Mann, F. A.: *see* Sorenson, J. A.
Mann, H.: *see* Smith, R. C.; *also see* Sorenson, J. A.; *also see* Traughber, P. D.
Mark, A. S., Feinberg, D. A., Brant-Zawadzki, M. N.: Changes in size and magnetic resonance signal intensity of the cerebral CSF spaces during the cardiac cycle as studied by gated, high-resolution magnetic resonance imaging, 290
Marmarou, A.: *see* Fatouros, P. P.
Marx, M. V.: *see* Picus, D.
Massry, S. G.: *see* Jabour, B. A.
McCann, R. L.: *see* Saeed, M.
McGahan, J. P., Lee, L. L., Tesluk, H., Nyland, T. G., Ruebner, B., Schmidt, B.: Dissolution of gallstones using cholecystostomy tube in the pig, 201
McGillem, M. J.: *see* Friedman, H. Z.
McGrath, J. T.: *see* Wood, A. K. W.
McLaughlin, P.: *see* Daniels, J. R.
McNamara, M. T.: *see* Engelstad, B. L.
Melanson, G.: *see* Huber, D. J.
Messersmith, R. N.: *see* Kahn, C. E., Jr.
Mettler, F. A., Jr.: *see* Tryhus, M.
Metz, C. E.: *see* Chan, H-P.
Meyer, C. R.: *see* Williams, D. M.
Michelow, P.: *see* Newman, B.
Middleton, W. D.: *see* Picus, D.
Miller, F. J.: *see* Traughber, P. D.
Mirvis, S. E., Bidwell, K., Buddemeyer, E. U., Diaconis, J. N., Pais, S. O., Whitley, J. E.: Imaging diagnosis of traumatic aortic rupture: a review and experience at a major trauma center, 187
Mitchell, C. R.: *see* Sorenson, J. A.
Mitchell, R. L.: *see* Thompson, W. M.
Montgomery, A. B., Paajanen, H., Brasch, R. C., Murray, J. F.: Aerosolized gadolinium-DTPA enhances the magnetic resonance signal of extravascular lung water, 377
Moody, M. A.: *see* Whitley, N. O.
Mooney, V.: *see* Sartoris, D. J.
Moore, R. J.: *see* Christiansen, E. L.
Moran, J.: *see* Tobler, J.
Morris, T. W.: *see* Fischer, H. W.; *also see* Rubin, D. I.; *also see* Simon, J. H.
Morrish, R. H.: *see* Spinelli, J. S.
Moseley, M. E.: *see* Ogan, M. D.; *also see* Richards, T. L.; *also see* Schmiedl, U.
Moss, A. A.: *see* Kimmey, M. B.
Motohashi, O.: *see* Kusano, S.
Mukherji, M.: *see* Harnish, P.; *also see* Harnish, P. P.
Muller, H. H.: *see* Ballerio, C.
Muller, N.: *see* Gamsu, G.
Murata, K.: *see* Kusano, S.
Murdock, D. K.: *see* Piao, Z. E.
Murray, J. F.: *see* Montgomery, A. B.

N

Nadel, S.: *see* Reinus, W. R.
Nance, E. P., Jr.: *see* Kaye, J. J.
Nemcek, A. A., Jr., Ziewacz, J. T., Christiansen, R., Conard, F. U.: A 30-year-old woman with generalized skeletal pain, 752; *also see* Christensen, R.
Newman, B., Caldicott, W. J. H., Michelow, P.: Contrast media and renal function in the immature kidney, 608
Nichols, A. B.: *see* Nickoloff, E. L.
Nickoloff, E. L., Han, J., Esser, P. D., Nichols, A. B.: Evaluation of a cinevideodensitometric method for measuring vessel dimensions from digitized angiograms, 875; *also see* Hagan, J. J.
Niederau, C.: *see* Tsay, D-G.
Nodine, C. F.: *see* Kundel, H. L.
Noel, M. P.: *see* Mahoney, L. T.
Nordby, A., Halgunset, J., Haugen, O. A.: Cytostatic effects of radiographic contrast media synchronized cell cultures, 678
Nordby, A., Halgunset, J., Thorstensen, K., Haugen, O. A.: Short-term effects of radiographic contrast media on monolayer cell cultures and hepatocytes, 603
Northington, F. K.: *see* Harnish, P. P.
Noska, M. A.: *see* Zalutsky, M. R.
Novelline, R. A.: Increasing the faculty of medical student clerkships: possibilities often overlooked, 342
Nyland, T. G.: *see* McGahan, J. P.

O

Ogan, M. D., Revel, D., Brasch, R. C.: Metalloporphyrin contrast enhancement of tumors in magnetic resonance imaging: a study of human carcinoma, lymphoma, and fibrosarcoma in mice, 822
Ogan, M. D., Schmiedl, U., Moseley, M. E., Grodd, W., Paajanen, H., Brasch, R. C.: Albumin labeled with Gd-DTPA: an intravascular contrast-enhancing agent for magnetic resonance blood pool imaging: preparation and characterization, 665; *also see* Schmiedl, U.
Ohara, K.: *see* Fujita, H.
Ohuchi, H.: *see* Kusano, S.
Orlans, F. B.: Research protocol review for animal welfare, 253
Ortendahl, D. A.: *see* Crooks, L. E.

P

Paajanen, H., Schmiedl, U., Aho, H. J., Revel, D., Terrier, F., Brasch, R. C.: Magnetic resonance imaging of experimental renal hemorrhage, 792; *also see* Montgomery, A. B.; *also see* Ogan, M. D.
Pais, S. O.: *see* Mirvis, S. E.
Pals, M. A., Swartz, H. M.: Oxygen-dependent metabolism of potential magnetic resonance contrast agents, 497
Papp, M. A., Hughes, C., Lin, J. C., Pouget, J. M.: Doppler microwave: a clinical assessment of its efficacy as an arterial pulse sensing technique, 569
Park, H. M.: *see* Denham, J. S.
Parsons, G. H., Link, D. P., Greenberg, D., Lantz, B. M. T., Cross, C. E.: Bronchial blood flow measured by video dilution technique in sheep, 544
Partain, C. L.: *see* Kessler, R. M.
Patil, A. A.: *see* Yamanashi, W. S.
Patz, S.: *see* Jolesz, F. A.
Pedersen, D.: *see* Traughber, P. D.
Perkash, I., Friedland, G. W.: Principles of modern urodynamic studies, 279
Perlmutt, L. M.: *see* Cohan, R. H.
Phillips, K. A.: *see* Kaye, J. J.
Piao, Z. E., Murdock, D. K., Hwang, M. H., Raymond, R. M., Scanlon, P. J.: The effect of sodium on the fibrillatory propensity of nonionic contrast media, 895
Picus, D., Marx, M. V., Middleton, W. D.: Progressive stridor and hoarseness in a young black woman, 338
Pillari, G.: *see* Cohen, J. R.
Pincus, T.: *see* Kaye, J. J.
Pollei, S. R.: *see* Christensen, R.
Pope, C. F., Sostman, D., Carbo, P., Gore, J. C., Holcomb, W.: The detection of pulmonary emboli by magnetic resonance imaging: evaluation of imaging parameters, 937; *also see* Smith, R. C.; *also see* Sostman, D.
Posin, J. P.: *see* Crooks, L. E.
Pouget, J. M.: *see* Papp, M. A.
Pratt, P. C.: Radiographic appearance of the chest in emphysema, 927
Price, R. R.: *see* Kessler, R. M.
Putman, C. E.: The activities of the conjoint committee on diagnostic radiology, 925; *also see* Vock, P.; *also see* Whitley, N. O.

R

Rackow, P. L., Spitzer, V. M., Hendee, W. R.: Detection of low-contrast signals: A comparison of observers with and without radiology training, 311
Ralls, P. W.: *see* Jabour, B. A.
Ramos, E. C.: *see* Engelstad, B. L.
Ramsey, R. G., Czervionke, L., Dommers, M., James, M. E., Huckman, M. S., Russell, E. J.: Safety and efficacy of sodium and meglumine ioxaglate (hexabrix) and hypaque M60% in contrast-enhanced computed cranial tomographic scanning: a double-blind clinical study, 56
Ranade, S. S.: Cell type and proton relaxation, 346
Raptopoulos, V., Cummings, T., Smith, E. H.: Computed tomography of life-threatening complications of abdominal aortic aneurysm: the disrupted aortic wall, 372; *also see* Scatamacchia, S. A.
Raymond, R. M.: *see* Piao, Z. E.
Reinhold, C.: *see* Demas, B. E.
Reinus, W. R., Nadel, S.: Improved accuracy of single-energy computed tomography bone mineral determination using threshold analysis, 484; *also see* Goodsitt, M. M.
Resnick, D.: *see* Hajek, P. C.; *also see* Hayward, I.; *also see* Sartoris, D. J.
Revel, D.: *see* Ogan, M. D.; *also see* Paajanen, H.
Richards, T. L., Davis, C. A., Barker, B. R., Beinert, W. D., Genant, H. K.: Lipid/water ratio of bone marrow measured by phase-encoded proton nuclear magnetic resonance spectroscopy, 741
Richards, T. L., Terrier, F., Sievers, R. E., Lipton, M. J., Moseley, M. E., Higgins, C. B.: Lactate accumulation in ischemic and anoxic-isolated rat hearts assessed by H-1 spectroscopy, 638
Richter, J. M., Christensen, M. R., Simeone, J. F., Hall, D. A., Silverstein, M. D.: Chronic cholecystitis: an analysis of diagnostic strategies, 111
Ring, E. J.: *see* Daniels, J. R.
Ringertz, H. G., Jaschke, W., Sievers, R., Lipton, M. J.: Relative carotid blood flow measurements in dogs by high-speed CT: a preliminary study, 960
Ritman, E. L.: *see* Liu, Y-H.
Roberts, D.: *see* Christiansen, E. L.
Roberts, L.: *see* Thompson, W. M.
Robinson, A. E.: AUR supspecialty recognition survey: the response, 429
Rogers, M. P.: *see* Denham, J. S.
Rohrmann, C. A.: *see* Kimmey, M. B.
Rosenthal, D. I.: *see* Goodsitt, M. M.
Rosmiarek, H.: Current and future policies regarding laboratory animal welfare, 175
Rossiter, S. C.: *see* Hopper, J. L.
Rothe, A. J., Young, J. W. R., Keramati, B.: The value of glucagon in routine barium investigations of the gastrointestinal tract, 786
Rowan, A. N.: Research protocol design and laboratory animal research, 615
Rubin, D. I., Kido, D. K., Morris, T. W., Fischer, H. W.: Effect of multiple intravenous injections of diatrizoate on iodine concentrations and osmolality: an experimental study in rabbits, 223
Ruebner, B.: *see* McGahan, J. P.
Russell, E. J.: *see* Ramsey, R. G.

S

Sackett, J. F.: *see* Whitley, N. O.
Saeed, M., Cohan, R. H., German, D. C., McCann, R. L., Dunnick, N. R.: Vascular injury and thromboembolism in a young woman, 62; *also see* Cohan, R. H.
Saini, S., Stark, D. D., Wittenberg, J., Vici, L-G, Brown, A. S., Ferrucci, J. T., Jr.: A rat model of liver cancer for imaging research, 149
Sands, M. S., Violante, M. R., Gadeholt, G.: Computed tomographic enhancement of liver and spleen in the dog with iodipamide ethyl ester particulate suspensions, 408
Sartoris, D. J., Haghighi, P., Resnick, D.: Painful swelling of the toe in a young boy, 170
Sartoris, D. J., Holmes, R. E., Bucholz, R. W., Mooney, V., Resnick, D.: Coralline hydroxyapatite bone-graft substitutes in a canine diaphyseal defect model: radiographic-histometric correlation, 590; *also see* Hajek, P. C.; *also see* Hayward, I.
Scanlon, P. J.: *see* Piao, Z. E.
Scatamacchia, S. A., Raptopoulos, V., Davidson, R. I.: Saline, microbubbles monitoring sonography-assisted abscess drainage, 868
Scatliff, J. H.: *see* Cuttino, J. T., Jr.; *also see* Delany, D. J.
Schauwecker, D. S.: *see* Denham, J. S.
Schirmer, B. D., Jones, R. S.: Peptic ulcer disease, 437
Schmaman, A.: *see* Isdale, J. M.
Schmidt, B.: *see* McGahan, J. P.
Schmidt, H.: *see* Tsay, D-G.
Schmiedl, U., Moseley, M. E., Sievers, R., Ogan, M. D., Chew, W. M., Engeseth, H., Finkbeiner, W. E., Lipton, M. J., Brasch, R. C.: Magnetic resonance imaging of myocardial infarction using albumin-(Gd-DTPA), a macromolecular blood-volume contrast agent in a rat model, 713; *also see* Ogan, M. D.; *also see* Paajanen, H.
Schouman-Claeys, E.: *see* Frija, G.
Schreiner, R. J.: *see* Williams, D. M.
Schwab, S. J.: *see* Cohan, R. H.
Seltzer, S. E.: *see* Cheng, K. T.; *also see* Zalutsky, M. R.
Selwyn, A.: *see* Kandarpa, K.
Sherman, J. L.: *see* Hopper, K. D.
Shiplett, C. A.: *see* Denham, J. S.
Shortkroff, S.: *see* Zalutsky, M. R.
Shuman, W. P.: *see* Kimmey, M. B.
Sickles, E. A.: *see* Chan, H-P.
Siddiqui, A. R.: *see* Denham, J. S.
Sievers, R.: *see* Schmiedl, U.
Sievers, R. E.: *see* Richards, T. L.
Silverstein, F. E.: *see* Kimmey, M. B.
Silverstein, M. D.: *see* Richter, J. M.
Simeone, J. F.: *see* Richter, J. M.
Simmonds, R. C.: Training programs for researchers using animals, 756
Simon, J. H., Ekholm, S. E., Morris, T. W., Fonte, D. J.: Further support for the glucose hypothesis of metrizamide toxicity: the effect of metrizamide and glucose analogue-free contrast media on hexokinase, 137
Simons, M. A., Bastian, B. V., Bray, B. E., Dedrickson, D. R.: Comparison of observer and videodensitometric measurements of simulated coronary artery stenoses, 562
Skorton, D. J.: *see* Mahoney, L. T.
Sledge, C.: *see* Zalutsky, M. R.
Smith, D. C.: *see* Jasinski, R. W.
Smith, E. H.: *see* Raptopoulos, V.
Smith, G. J. W.: *see* Sostman, D.
Smith, G. W.: *see* Taylor, C. R.
Smith, H., Thorne, M. C.: The origins and work of the international commission on radiologic protection, 918
Smith, R. C., Mann, H., Greenspan, R. H., Pope, C. F., Sostman, H. D.: Radiographic differentiation between different etiologies of pulmonary edema, 859
Smith, W.: *see* Mahoney, L. T.
Smith, W. L., Kathol, M., Franken, E. A., Jr., Albanese, M.: Curriculum topics in radiology education, 521
Solorzano, C.: *see* Huber, D. J.
Sorenson, J. A., Mitchell, C. R., Armstrong, J. D., II, Mann, H., Bragg, D. G., Mann, F. A., Tocino, I. B., Wojtowycz, M. M.: Effects of improved contrast on lung-nodule detection: a clinical ROC study, 772
Sostman, D., Pope, C. F., Smith, G. J. W., Carbo, P., Gore, J. C.: Proton relaxation in experimental clots varies with method of preparation, 509; *also see* Pope, C. F.
Sostman, H. D., Zoghbi, S. S., Carbo, P.,

Lord, P. F.: Coumadin and ^{111}in-labeled platelet uptake on experimental thrombi in dogs, 216; *also see* Smith, R. C.; *also see* Taylor, C. R.
Spinelli, J. S., Morrish, R. H.: Pain and discomfort: how to recognize and manage pain associated with animal research, 348
Spitzer, V. M.: *see* Rackow, P. L.
Springer, C.: *see* Lee, R. G. L.
Stadeager, C.: *see* Duus, B. R.
Stanton, G. J., Weigent, D. A., Fleischmann, W. R., Jr., Dianzani, F., Baron, S.: Interferon review, 259
Stark, D. D.: *see* Saini, S.
Steinmetz, S. D.: *see* Burgener, F. A.
Stewart, L. M.: *see* Fatouros, P. P.
Struyven, J.: *see* Delcour, C.
Stude, R. A., Hedlund, L. W., Johnson, G. A., Thompson, W. M.: Contrast enhancement of the liver: evaluation by automated contiguous pixel search, 132
Sullivan, D. C., Effmann, E. L., Chen, J. T.: Radiology instruction in the medical school: experience with an alternative curriculum, 246
Sussman, S. K.: *see* Cohan, R. H.
Swartz, H. M.: *see* Bennett, H. F.; *also see* Pals, M. A.
Swensen, H. E.: *see* Burk, D. L., Jr.

T

Tang, W. W.: *see* Jabour, B. A.
Taylor, C. R., Sostman, H. D., Gore, J. C., Smith, G. W.: Proton relaxation times in bleomycin-induced lung injury, 621
Taylor, R. C.: *see* Hoehne, K. H.
Terrier, F., Hricak, H., Berry, I, Yen, B. T. S., Grodd, W.: Edema and the lack of blood perfusion produce opposite effects on the magnetic resonance characteristics of acutely ischemic rat kidneys, 118; *also see* Paajanen, H.; *also see* Richards, T. L.
Tesluk, H.: *see* McGahan, J. P.
Thibault, L. E.: *see* Goldstein, D. C.
Thickman, D.: *see* Kundel, H. L.
Thoeni, R. F.: Radiography of the small bowel and enteroclysis: a perspective, 930
Thompson, B. G.: *see* Delany, D. J.
Thompson, J. R.: *see* Christiansen, E. L.
Thompson, W. M., Halvorsen, R. A., Jr.: Computed tomographic staging of gastrointestinal malignancies: part III. the small bowel, colon, and rectum, 96
Thompson, W. M., Mitchell, R. L., Halvorsen, R. A., Jr., Foster, W. L., Jr., Roberts, L.: Scientific presentations: what to do and what not to do, 244; *also see* Halvorsen, R. A., Jr.; *also see* Stude, R. A.
Thorne, M. C.: *see* Smith, H.
Thorstensen, K.: *see* Nordby, A.
Tobler, J., Levitt, R. G., Glazer, H. S., Moran, J., Crouch, E., Evens, R. G.: Differentiation of proximal bronchogenic carcinoma from postobstructive lobar collapse by magnetic resonance imaging: comparison with computed tomography, 538
Tocino, I. B.: *see* Sorenson, J. A.
Toto, L.: *see* Kundel, H. L.
Traughber, P. D., Wojtowycz, M. M., Karwande, S. V., Mann, H., Hunt, S. T., Miller, F. J., Pedersen, D.: Enlarging mediastinal mass, 240
Tress, B. M.: *see* Hopper, J. L.
Tryhus, M., Mettler, F. A., Jr., Kelsey, C.: The radiologist and angiographic procedures: absorbed radiation dose, 747
Tsay, D-G., Niederau, C., Schmidt, H., Goldberg, H. I., Higgins, C. B., Ferrell, L. D., Grendell, J. H.: Experimental acute pancreatitis: in vitro magnetic resonance characteristics, 556
Tschaeppeler, H.: *see* Vock, P.
Tumeh, S. S.: *see* Lipman, J. C.

U

Utz, J.: *see* Dimick, R. N.

V

Valentine, J. L.: *see* Yamanashi, W. S.
Valji, K., Bookstein, J. J.: Fibrinolysis with intrathrombic injection of urokinase and tissue-type plasminogen activator: results in a new model of subacute venous thrombosis, 23
Vandenbosch, G.: *see* Delcour, C.
Vanderhofstadt, A.: *see* Delcour, C.
Van Dyke, J. A.: *see* Koslin, D. B.
Venkatesan, P.: *see* Zalutsky, M. R.
Vici, L-G.: *see* Saini, S.
Violante, M. R.: *see* Lauteala, L.
Violante, M. R.: *see* Sands, M. S.
Vock, P., Hedlund, L. W., Herfkens, R. J., Effmann, E. L., Brown, M. A., Putman, C. E.: Work in progress: in vitro analysis of pleural fluid analogs by proton magnetic resonance: preliminary studies at 1.5T, 382
Vock, P., Malanowski, D., Tschaeppeler, H., Kirks, D. R., Hedlund, L. W., Effmann, E. L.: Computed tomographic lung density in children, 627
Vyborny, C. J.: *see* Chan, H-P.
Vydareny, K. H.: *see* Whitley, N. O.

W

Ward, J. H.: The structure, function, and regulation of transferrin receptors, 74
Weigent, D. A.: *see* Stanton, G. J.
Weisdorf, D. J.: Bone marrow transplantation for acute leukemia, 839
White, D. L.: *see* Engelstad, B. L.
White, R. I.: *see* Labs, J. D.
Whitley, J. E.: *see* Mirvis, S. E.
Whitley, N. O., Evens, R. G., Moody, M. A., Putman, C. E., Sackett, J. F., Vydareny, K. H.: Advancement of women in academic radiology, 431
Williams, C. D.: *see* Zagoria, R. J.
Williams, D. M., Meyer, C. R., Schreiner, R. J.: Flow effects in multislice, spin-echo magnetic resonance imaging: model, experimental verification, and clinical examples, 642
Williams, G. M.: *see* Labs, J. D.
Williams, M. D.: *see* Hopper, K. D.
Williams, R. D.: *see* Demas, B. E.
Winer-Muram, H., Gavant, M. L.: Asymptomatic left apical mass in an elderly man, 982
Winfield, A. C.: *see* Kaye, J. J.
Wist, A. O.: *see* Fatouros, P. P.
Wittenberg, J.: *see* Saini, S.
Wojtowycz, M. M.: *see* Sorenson, J. A.; *also see* Traughber, P. D.
Wolf, G. L.: *see* Burk, D. L., Jr.
Wood, A. K. W., Kundel, H. L., McGrath, J. T., Wortman, J. A.: Computed tomography, magnetic resonance imaging, and pathologic observations of the effects of intrathecal metrizamide and iohexol on the canine central nervous system, 672
Wortman, J. A.: *see* Wood, A. K. W.
Wright, P. G.: *see* Isdale, J. M.
Wynne, C. S.: *see* Engelstad, B. L.

Y

Yamanashi, W. S., Patil, A. A., Valentine, J. L., Hill, D. L., LePage, J. R., Filip, O. F., Lester, P. D.: Electromagnetically induced focused heat in the treatment of surgically created aneurysm models, 574
Yaru, N.: *see* Hayward, I.
Yen, B. T. S.: *see* Terrier, F.
Yost, F. J.: *see* Hagan, J. J.
Young, J. W. R.: *see* Rothe, A. J.
Young, S. W.: *see* Ballerio, C.

Z

Zagoria, R. J., D'Souza, V. J., Baker, A. L.: Recommended precautions when using low-osmolality of nonionic contrast agents with vasodilators, 513
Zagoria, R. J., Higgins, W. J., King, G. T., Williams, C. D.: Elderly man with hematuria and a pelvic mass, 424
Zalutsky, M. R., de Sousa, M., Venkatesan, P., Shortkroff, S., Zuckerman, J., Sledge, C.: Evaluation of indium-111 chloride as a radiopharmaceutical for joint imaging in a rabbit model for arthritis, 733
Zalutsky, M. R., Noska, M. A., Seltzer, S. E.: Characterization of liposomes containing iodine-125-labeled radiographic contrast agents, 141
Ziewacz, J. T.: *see* Nemcek, A. A., Jr.
Zoghbi, S. S.: *see* Sostman, H. D.
Zuckerman, J.: *see* Zalutsky, M. R.